## Beckwith, William

From: Beckwith, William

Sent: Wednesday, April 10, 2013 9:59 AM

To: Tabor, Brock N (DEC)

**Subject:** RE: Comments on mixed metals

## Brock -

- Expect to hear from Duluth this week on the metals mixture and WERs.

- I am also seeking review from others on ADEC's proposal to raise a calculated manganese value of "0.29 mg/l" (actually calculated as 0.293 mg/l, and rounded, I believe?) to 0.300 mg/l on the basis that it is not statistically different. I am not aware that such adjustments are normal practice. In addition, the rules of rounding and significant figures are not my strong point.
- Also, with regard to the BCF-BAF value used in the manganese calculations:
  - In a 2/2/10 draft document "Development of site-specific Human Health Water Quality Standards for Manganese for the Chuit River Basin, Alaska," Tetra Tech did calculations with a BCF (or BAF?) of 5.07 for salmon based on site-specific info, and a BCF from the literature for brown trout of 17.8.
  - In a 1/13/11 memorandum "Revision of site-specific Mn criteria based on EPA comments," Tetra Tech used a site-specific BCF (really a BAF?) of 3.45, reported as being the mean of two value, 1.3 and 5.6, from two locations in the proposed project area. I understand that the 17.8 was not used based on EPA comments, but I found no explanation about what happened to the 5.07 used in the 2/2/10 document.
  - ADEC, in its revised draft decision document, used the info from Tetra Tech's 1/13/11 memorandum, but changed the 3.45 calculated by Tetra Tech to 3.4.

ADEC should ensure that it provides sound rational for the BCF-BAF it chooses, including documentation that the chosen value was appropriately derived.

- Some insight concerning the manganese literature summaries I sent. I am told that the current information suggests that a new risk assessment will likely need to consider child specific exposure factors due to increased sensitivity to manganese in infants and possibly children.
- With regard to info from PacRim/Tetra Tech; I sent a 4/2/13 message to Dan Graham, via a message to Carl, inquiring if a series of tests spanning the target level for the WER confirmation tests had been run, as was indicated in Dan's 12/14/10 email. I also sent the following comment/question to Carl/ADEC only, in a different email. Is this part of what the info you are waiting for?

As noted previously, to my knowledge we have not seen any documentation with regard to the site-water sample used in the metals mixture test, such as water quality data for key parameters that could effect WERs/site-specific criteria and stream flow when the sample was collected. Page 2 of Tetra Tech's 1/7/11 report of the metals mixture test results indicates that water quality data were collected; and, though not included with the parameters listed in the 1/7/11 report, a 12/7/10 email from Dan Graham indicates that TSS and stream flow measurements were also performed. I believe you also made note of asking for the full report on the mixed metal toxicity test? Have you requested this info?

- I am pretty much full time on another project this week into early next; but hopefully I will hear from folks within EPA this week, and can pass comments on to you mid next week (pending how much internal discussion is necessary).

- Sorry to hear that your local hill is closing...no lift service spring corn season. We had a bit on the heavy side but decent (if one stayed high on the mtn.), powder day last Sunday in 12" new. How did your tele-racing go?

- Bill 206-553-2495

From: Tabor, Brock N (DEC) [mailto:brock.tabor@alaska.gov]

Sent: Tuesday, April 09, 2013 4:29 PM

To: Beckwith, William

**Subject:** Comments on mixed metals

Hello Bill,

Any word from your counterpart in Duluth yet?

I'm still waiting for more info from TT/PacRim.

The hill closes this weekend. Back to "earning" my turns. Probably have to try catching a fish as well. Spring kings are starting...it's a terminal fishery but better than eating freezer-burnt coho.

**Brock Tabor** 

brock.tabor@alaska.gov

Alaska Dept. of Environmental Conservation

Division of Water: Water Quality Standards, Assessment & Restoration

(907) 465-5185

http://www.dec.alaska.gov/water/wqsar/index.htm